

CLAIMS

1. An image coding apparatus comprising:

means for performing coding processing of
5 images on a macroblock-by-macroblock basis; and
significance decision means for detecting an
amount of codes included in a plurality of
macroblocks whenever said plurality of macroblocks
coded in said coding means are generated as one
10 transmission unit, and deciding the significance in
image decoding at a transmission end of the
transmission unit according to the detected amount
of codes.

2. An image coding apparatus comprising:

15 coding means for performing coding processing
of images on macroblock-by-macroblock basis; and
significance decision means for counting a
number of macroblocks and an amount of codes included
in one transmission unit whenever a plurality of
20 macroblocks coded in said coding means are generated
as said one transmission unit, obtaining an average
amount of codes per macroblock from the counted
results, and deciding the significance in image
decoding of the transmission unit at a transmission
25 end according to the obtained average amount of
codes.

3. An image coding apparatus comprising:

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coding means for dividing a digital image into macroblocks to perform coding processing on a macroblock-by-macroblock basis; and

significance decision means for deciding the
5 significance in image decoding of a transmission unit at a transmission end according to whether picture header information required for image decoding is included in a plurality of macroblocks whenever said plurality of macroblocks coded in said coding means
10 are generated as one transmission unit.

4. An image transmission apparatus comprising:
significance decision means for detecting an
amount of codes included in a plurality of
macroblocks whenever one transmission unit having
15 said plurality of coded macroblocks is input, and deciding the significance in image decoding of the transmission unit at a transmission end according to the detected amount of codes.

5. An image transmission apparatus comprising:
20 significance decision means for counting a number of macroblocks and an amount of codes included in one transmission unit whenever said one transmission unit having said plurality of coded macroblocks is input, obtaining an average amount
25 of codes per macroblock from the counted results, and deciding the significance in image decoding of the transmission unit at a transmission end according

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to the obtained average amount of codes.

6. An image transmission apparatus comprising:
 significance decision means for deciding the
 significance in image decoding of a transmission unit
 at a transmission end according to whether picture
 header information required for image decoding is
 included in a plurality of macroblocks whenever the
 transmission unit having said plurality of coded
 macroblocks is input.

7. An image distribution server comprising the
 image transmission apparatus according to claim 5.

8. A base station apparatus comprising the image
 transmission apparatus according to claim 5.

9. An image coding method comprising:
 dividing a digital image into macroblocks to
 perform coding processing on a
 macroblock-by-macroblock;

adding, whenever one transmission unit is
 generated from a plurality of coded macroblocks,
 significance information to the transmission unit;
 and

deciding the significance according to an
 amount of codes included in the transmission unit.

10. An image coding method comprising:

dividing a digital image into macroblocks to
 perform coding processing on a
 macroblock-by-macroblock basis;

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adding, whenever one transmission unit is generated from said plurality of coded macroblocks, significance information to the transmission unit; and

5 obtaining an average amount of codes per macroblock from counted results of the number of macroblocks and an amount of codes included in the transmission unit, and deciding the significance according to the obtained average amount of codes.

10 11. An image coding system, wherein dividing a digital image into macroblocks to perform coding processing on a macroblock-by-macroblock basis;

15 adding, whenever said one transmission unit is generated from said plurality of coded macroblocks, significance information to the transmission unit; and

20 deciding the significance according to whether picture header information required for image decoding is included in the transmission unit.

12. A computer-readable recording medium which stores an image coding program comprising:

25 a coding procedure of dividing a digital image into macroblocks to perform coding processing on a macroblock-by-macroblock basis;

a transmission-unit generation procedure of generating one transmission unit from a plurality

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of macroblocks coded in said coding procedure; and

a significance-information addition procedure of deciding, whenever the one transmission unit is generated in said transmission-unit generation
5 procedure, the significance according to an amount of codes included in the transmission unit, and adding the decided significance as significance information to the transmission unit.

13. A computer-readable recording medium which
10 stores an image coding program comprising:

a coding step for dividing a digital image into macroblocks to perform coding processing on a macroblock-by-macroblock basis;

a transmission-unit generation procedure of
15 generating one transmission unit from a plurality of macroblocks coded in said coding procedure; and

a significance-information addition procedure of obtaining an average amount of codes per macroblock from counted results of the number of
20 macroblocks and an amount of codes included in the transmission unit whenever the one transmission unit is generated in transmission-unit generation step, and adding the decided significance as significance information to the transmission unit.

14. A computer-readable recording medium which
25 stores an image coding program comprising:

a coding procedure of dividing a digital image

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into macroblocks to perform coding processing on a macroblock-by-macroblock basis;

a transmission-unit generation procedure of generating one transmission unit from a plurality of macroblocks coded in said coding procedure; and

a significance-information addition procedure of deciding the significance according to whether picture header information required for image decoding is included in the one transmission unit whenever the one transmission unit is generated in said transmission-unit generation procedure, and adding the decided significance as significance information to the transmission unit.

15. An image coding apparatus comprising the recording medium according to claim 12.

16. A significance decision method comprising:
detecting an amount of codes included in one transmission unit having a plurality of coded macroblocks; and

deciding the significance in image decoding of the transmission unit at a transmission end according to the detected amount of codes.

17. A significance decision method comprising:
counting the number of macroblocks and an amount of codes included in one transmission unit having a plurality of coded macroblocks;

obtaining an average amount of codes per

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macroblock from the counted result; and

deciding the significance in image decoding of the transmission unit at a transmission end according to the obtained average amount of codes.

5 18. A significance decision method, wherein the significance in image decoding of a transmission unit at a transmission end is decided according to whether picture header information required for image decoding is included in the transmission unit having a plurality of coded macroblocks.

10 19. A computer-readable recording medium which stores a significance decision program comprising:

15 an amount-of-code detection procedure of detecting an amount of codes included in one transmission unit having a plurality of coded macroblocks; and

a significance decision procedure of deciding the significance in image decoding of the transmission unit at a transmission end according to the amount of codes detected in said amount-of-code detection procedure.

20 20. A computer-readable recording medium which stores a significance decision program comprising:

25 a number-of-macroblock/amount-of-code detection procedure of counting the number of macroblocks and an amount of codes included in one transmission unit having a plurality of coded

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macroblocks; and

a significance decision step of obtaining an average amount of codes per macroblock from the counted results in said

5 number-of-macroblock/amount-of-code detection procedure, and deciding the significance in image decoding of the transmission unit at a transmission end according to the obtained average amount of codes.

10 21. A computer-readable recording medium which stores a significance decision program comprising:

a significance decision procedure of deciding the significance in image decoding of a transmission unit at a transmission end according to whether
15 picture header information required for image decoding is included in the transmission unit having a plurality of coded macroblocks.

22. An image transmission apparatus comprising the recording medium according to claim 19.

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